

TESTIMONY OF PETER LEIPZIG
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OF THE
FISHERMEN'S MARKETING ASSOCIATION
BEFORE THE
SENATE SUBCOMMITTEE ON OCEANS AND FISHERIES
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Madame Chairwomen and members of the Subcommittee, my name is Peter Leipzig. I am the Executive Director of the Fishermen's Marketing Association. I represent commercial groundfish and shrimp fishermen in Washington, Oregon, and California.

I have worked for the Fishermen's Marketing Association since 1978. My education is in the fields of Zoology and Wildlife Management. In the past I have worked for the National Marine Fisheries Service and the California Department of Fish and Game.

I have been a participant in the Pacific Fishery Management Council process for nearly 22 years. I have served on numerous Council committees and as a Council member for two terms. Including two years as vice-chair.

I have been asked to focus my comments on the Stock Assessment Process and Data Collection. The quality and quantity of data available for any species limits the quality of any of our stock assessments. Do we need more data? Yes we need more data of various types. However, we will never obtain some data. We can not go back in time and begin to collect information that we did not collect in the past. This missing data is a major short fall in many of our assessments.

In most cases we lack the most fundamental information, such as landings data beyond 20 years ago. We used to lump, 50 some species together as "other rockfish". In other cases we lack length, weight, and sex information. Bony structures used to age fish are not collected for most species. And needless to say without bony structures, age validation studies for most species are not being conducted.

The fisheries independent survey work that NMFS has performed for the longest time period on the Pacific Coast is conducted once every three years. This survey provides biomass estimates that are generally plus or minus 100%.

So where are we? We do not know how many fish we caught, we do not know how old they were, we do not know how fast they grow, and we have poor estimates of trends in the populations.

Even though we lack historical information and little progress is being made to collect contemporary data, the management system is demanding more and more technical answers.

I am a supporter of the Council process and of regional management of the resource. However, I believe that our current system is broken. We have made this process too complicated and too rigid. We are demanding too much from science. An assessment scientist must tell the Council what the current biomass is, what the unfished biomass was, and project yields for quotas into the future. In reality, we would be lucky to show whether a population is changing. Yes, assessment scientists can produce the information we ask of them, but around the country sport and commercial fishermen are reacting with disbelief to many of these assessments. Their perception of the status of a stock of fish does not jive with the conclusions of many stock assessments.

To better understand fish populations, biologists have attempted to model them. This requires information about growth, mortality, and removals. This required information is the same data that we are missing or have very little. We also assume that the environment is constant. We assume that a fish population in a state of equilibrium will produce the same amount of offspring, will grow at the same rate, and produce the same amount of fish that can be harvested year after year.

Change in the environment is not part of the model even though we know the ocean environment is a dynamic, ever changing system. We know from science that there are very long-term changes in the environment. We know that many years ago there was an ice age and that gradually the environment has warmed up. We also see very short-term changes. From year to year the ocean environment is different and for some species this may be seen as strong year classes.

What we are beginning to understand is that there are changes that are more intermediate in length. These may be 10 to 40 years in duration. During these periods some species may prosper, while others may decline. When these conditions reverse, those species that had done well may begin to decline and those that had not done well will increase in abundance.

Oceanographers call these changes "regime shifts". It is widely agreed that a regime shift occurred in the North Pacific in the late 1970's. During this time we saw a decline in abundance of Northern Anchovy and an increase in abundance in Pacific Sardine. More importantly to the Pacific groundfish fishery, there has been a dramatic decrease in the survival of young rockfish. For Bocaccio rockfish, there

has been a near complete recruitment failure since the late 1970's.

Why am I dwelling on this point? It is important in fisheries management that we do not simply take a "snap shot in time" and assume that those conditions will continue in the future. Fish populations that exist today could decline in the future simply because of changes in the ocean environment. Similarly, a fish population in the past may have been very large because environmental conditions were good, while the population may currently be at a low level because environment conditions are poor.

Central to our management system is the concept of Maximum Sustainable Yield (MSY). This concept assumes that there is some maximum amount of fish that can be removed from a stock of fish every year with out impacting the stock. This concept assumes that the environment is relatively stable and therefore has little impact on the abundance of fish. This concept is flawed. We know the environment can significantly influence the abundance of fish.

There is a concept in Wildlife Management that has never made it into fisheries management, called the Carrying Capacity. This is the maximum population the environment can support any point in time. It recognizes that the environment changes and therefore the number of animal will also change. I believe this concept should be incorporated into the Act in relation to MSY.

If the Act were to incorporate such a concept, then we could begin to think about stocks being at low levels of abundance as a result of: 1) overfishing, 2) man caused impacts to the environment, and 3) natural fluctuation to the environment. Currently, the Act labels any stock at low levels of abundance as "overfished", even when a river dries up in a drought and all the salmon die. This distinction would allow Councils to continue to address overfishing problems, but could provide Councils needed flexibility in managing other stocks of fish.

One example of a data poor situation that the Pacific Council has dealt with this past year is the Southern Lingcod. The Assessment was peer reviewed by a Stock Assessment Review (STAR) Panel last summer.

During the several-day review, the author on a daily basis expressed his opinion that sufficient data did not exist to conduct the assessment. He had only six years of biological information. He did have three sets of fishery-dependent trend data; however, none of these included the last several years. The modeling exercise was conducted and an estimate of current biomass was produced. An unfished biomass was estimated using high estimates of recruitment from earlier periods of greater abundance.

It was determined that the current biomass was less than 10% of the unfished level; therefore the stock was declared overfished. Sport and commercial fishermen both

believed the stock to be in excellent condition. Never the less, regulations have been implemented that effectively have terminated a fishery for Lingcod.

All of the data used in this assessment came from the fishery. Without a fishery there is no method to monitor the recovery of this stock from its declared overfished state. The rebuilding plan contains a schedule of how much Lingcod can be taken every year, and at the end of ten years the stock will be declared rebuilt. The loss of the fishery data over that ten-year period will hinder future stock assessment.

In conclusion, we need increase data collection through survey work and port sampling. We need to improve our data collection system of tracking landings, including recreational catch. There is the need for more personnel to collect and deal with this additional data. But most importantly we need to impose common sense in determining when stock assessments can be conducted. We need to think about non-quota approaches to managing some of our fish. The system must become more flexible.

Lastly, we need to begin addressing fishing capacity reduction on a national level. And I ask you to lift the moratorium on new ITQ systems.